

CMCC 274X5.8

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28 January 1958

To: WRS [REDACTED]

From: R-W [REDACTED]

Info: Headquarters and WRSP-2

Subject: Reply to undated "Special Technical Report

SAPC 24043

COPY / OF /

The paragraphing in this letter corresponds to the paragraphing of the report referenced above.

1. An answer to this paragraph will be sent in a few days.

2. The modified System 1 was designed to have enough gain to record crystal noise on tape. Crystal noise is just barely perceptible on the tape. This ensures that the very weakest signals will be recorded. Ideally, the analysis people would like to have 10 db of crystal noise recorded on the tape. The modified System 1 was not able to meet this requirement.

3. Some of the apparent self lock-ons in System 3 are caused by oscillator harmonics feeding back through the r-f line. We have no explanation for this occurrence in flight when it does not occur on the bench - unless the system does not reach as high a temperature in flight and, hence, the sensitivity does not degrade as much as on the bench.

4. Please keep track of changes that you make in the System 3 junction box. Future plans will be based upon present schematics.

5. [REDACTED] is now located more or less permanently at the factory. He will probably deliver System 6 to Detachment C.

8.a. The following method should be used to set up the bias on the 3-channel high-speed transcription gear. Record and simultaneously play back a 5000-cps sinewave. Adjust the bias on the recording amplifier for maximum playback amplitude. The bias adjustment should be sufficient to reach a maximum playback amplitude and then cause a 2 to 4 db drop in playback level by increasing the bias to its maximum value. If you do not have this range of control, there are troubles in the bias circuitry.

8.b. Ten revised editions of the A rack instruction manual were delivered to the depot on 28 October 1957 under document No. 108C. This manual is MP-11892.

8.c. If you experience improper stopping of the voice readout transport, it is probably a wiring trouble or an improper setting of the gain control in the pulse amplifier.

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8.d. Crosstalk or feed-through in the monitor chassis has never been experienced at the factory. This is probably a grounding problem.

8.e. It is not a good idea to adjust the reel tension in the Ampex transports. Use the "Reel Size" switch in the "Small" position. Check the capstan idler compression adjustment.

10. The switch on the System 3 test set labeled "1-kc Rejection" indicates that 1 kc is rejected when the switch is on.

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Questions regarding the Data Reduction Equipment are being studied and answers will be sent as soon as possible.

The factory needs two copies of your field reports. Please include this extra copy with your future reports. Indicate distribution of two copies to the factory on the heading of each report.

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PWA:hcp

NOTE: - WRSP-3.

When the System 5 at WRSP-3 is returned to the depot, please include the remote control box for the 14-channel transport.

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